

CAS 100-41-4

Substance name Ethylbenzene

Toxicity

Ethylbenzene is classified as a carcinogen by authoritative sources.^{1,2,3} Evidence is based on liver and kidney toxicity in rodents, kidney tumors in rats, and lung and liver tumors in mice.⁴ Ethylbenzene can produce developmental effects in rabbits, mice, and rats although these effects may be secondary to maternal toxicity.⁴

Exposure

Ethylbenzene is a high production chemical used primarily in the production of styrene monomer, with smaller amounts used to make several other chemicals.⁴ Ethylbenzene is present at up to 25% in mixed xylenes which are used as solvents in many products.³ Ethylbenzene was detected in consumer product testing by the Danish EPA in marker pens, slimy toys, and children's tents.⁵ It was also listed on the MSDS of lacquer applied to wooden toys at 1-2.5%.⁵ Ethylbenzene was detected widely in the blood of the general U.S. population.⁶

References

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2. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment. Public Health Goal for Ethylbenzene in Drinking Water. December, 1997.
http://www.oehha.ca.gov/water/phg/pdf/etbx2_c.pdf
3. WHO, International Agency for Research on Cancer (IARC). Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 77, Some Industrial Chemicals. 2000.
<http://monographs.iarc.fr/ENG/Monographs/vol77/mono77.pdf>.
4. U.S DHHS, Agency for Toxic Substances & Disease Registry. Toxicological Profile for Ethylbenzene. 2010. <http://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=383&tid=66>.
5. Danish Ministry of the Environment, Environmental Protection Agency. Surveys on Chemicals in Consumer Products. Reports 33, 46, 67 and 93 (2003-2008).
http://www.mst.dk/English/Chemicals/Consumer_Products/Surveys-on-chemicals-in-consumer-products.htm.
6. Centers for Disease Control and Prevention (CDC), Fourth National Report on Human Exposure to Environmental Chemicals, December 2009. http://www.cdc.gov/exposurereport/data_tables/.